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EXPENSE PREFERENCE BEHAVIOR BY MANAGERS IN CASINO RESORTS

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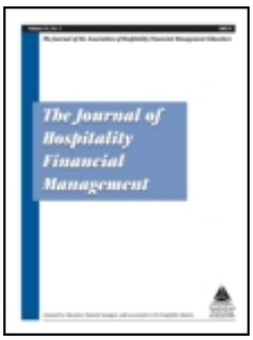

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EXPENSE PREFERENCE BEHAVIOR BY MANAGERS IN CASINO RESORTS

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ABSTRACT. The main goal of management in the United States is to maximize the wealth of shareholders. Managers, though, sometimes make decisions that benefit them more than the shareholders. When this occurs they are considered to be exhibiting expense preference behavior. This study evaluates expense preference behavior by managers of Nevada casinos. Using ordinary least squares regression, significant positive results show that for each 1% increase in revenue, employees increase 0.88%, salaries and wages increase 0.98%, and total payroll increases 1.01%. Also during the biggest economic downturn to hit Nevada casinos, management significantly decreased employees 14.7%, salaries and wages 4.9%, and total payroll 3.9%. Since managers are able to decrease payroll-related expenses after controlling for the change in business volumes, they are most likely operating inefficiently during good economic times. These additional expenses equate to a lower net income, which decreases owners' residual income and increases the need to borrow during growth periods.

INTRODUCTION

The main goal of many firm managers in the United States is to maximize the wealth of their shareholders. Casino firms are no exception. Some of the largest gaming companies in Nevada have company mission statements or goals in which shareholder wealth maximization is their main concern. MGM Resorts International (2014) and Boyd Gaming Corporation (2014) both have mission statements that mention increasing shareholder wealth as a goal. Many Nevada gaming companies also state that shareholder wealth maximization is a goal of the firm in their annual reports and on their websites.

Over the last five decades, some researchers have questioned whether managers are actually trying to increase the wealth of shareholders or whether they are more concerned with increasing their own utility. This concern led to the study of expense preference behavior by managers. Expense preference behavior occurs when managers attempt to increase their own well-being with additional pay or perquisites such as increased staff, luxurious offices, travel, or entertainment (Williamson, 1963). In addition to the empirical research on expense preference behavior, there are many recent business examples of managers of publicly traded companies acting in ways to increase their benefits at the expense of shareholders.

Recently, during the 2007–2009 government bailout of banks and mortgage companies, CEOs were accused of acting in unscrupulous ways. American International Group (AIG) received $85 billion in a government bailout and less than a week after receiving the bailout, top executives went on a week-long retreat, spending over $440,000 on rooms, meals, and spa treatments (Ross & Shine, 2008). After the bailout, the CEO still received a bonus of $15 million (Ross & Shine, 2008). AIG was not the only company under scrutiny. Bank of America was also criticized for paying $15 billion for Merrill Lynch bonuses for 2008, a year in which the company had an annual loss of $11 billion (Blodget, 2009). These bonuses were paid after

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Bank of America received $25 billion in government assistance in 2007 and $20 billion in cash and a $100 billion guarantee for loss of assets in January 2009 (Rucker & Stempel, 2009). These recent business examples show that executives do not always maximize the value of the firm and instead maximize their own utility, which supports expense preference behavior by managers.

Research shows that managers who exhibit expense preference behavior most likely spend more in payroll-related expenses (Carter & Stover, 1991; Edwards, 1977; Lewin, Derzon, & Margulies, 1981; Williamson, 1963). In Nevada casinos, payroll and benefits are the largest expense items, averaging 32.5% of gross revenue in 2013 (Nevada State Gaming Control Board, 2013). In casino jurisdictions outside of Nevada, payroll expenses are the first or second largest operating expenses behind only gaming taxes (American Gaming Association, 2013).

Payroll expenses are very controllable in the hospitality industry. They are typically adjusted with changes in business volumes. Casinos almost immediately laid off more than 10,000 employees after September 11, 2001, in response to the lower number of visitors (Benston, 2008b). Casino management realized this may have been an overreaction so during the 2007–2009 recession management laid off workers but at a slower pace. During 2007–2009, MGM Resorts International laid off 1,400 employees and Caesars Entertainment laid off 2,000 employees (Benston, 2008a, 2008b). Even after the state's gaming industry started to see year-over-year revenue increases, management was still decreasing payroll-related expenses (Nevada State Gaming Control Board, 2013). Figure 1 shows the trend in revenue and payroll expenses from 1990 to 2013. As shown in Figure 1, revenue in Nevada casinos has not yet rebounded to pre-recession levels seen in 2007.

The purpose of this study is to evaluate Nevada casino resort managers and to assess whether they may be maximizing their own utility over wealth maximization for shareholders.

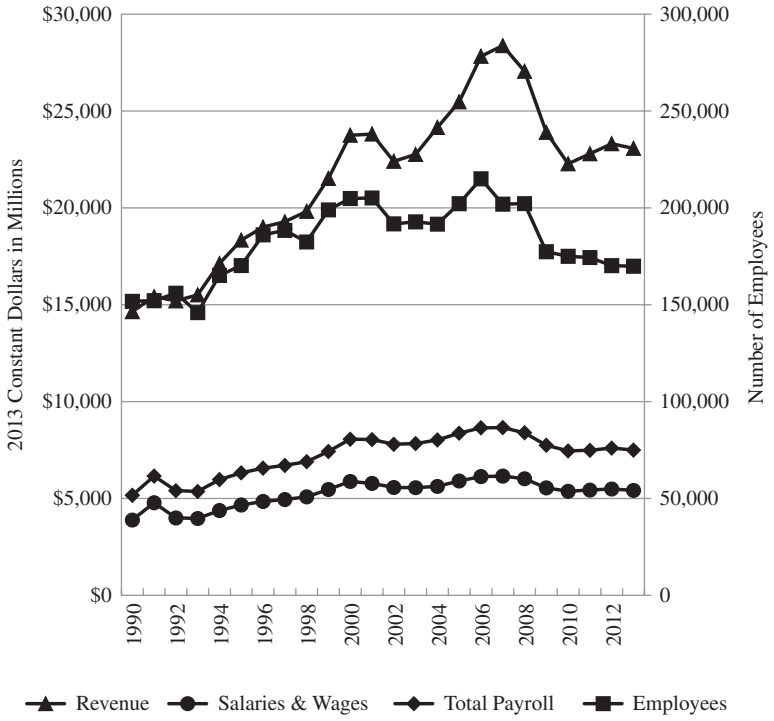

FIGURE 1. Revenue, employees, salaries and wages, and total payroll in Nevada casinos.

Specifically this study evaluates management's behavior in regard to payroll-related expenses. It is essential for casino owners to know whether their managers are striving to achieve personal wealth maximization. Every dollar that managers spend to maximize their own utility is one dollar fewer that the owners receive. While some may accept this when firms are making money, it is questionable when firms have declining revenues and profit margins. This study will also add to the current research on expense preference behavior. In particular, it will increase the amount of research on expense preference behavior by managers in hospitality organizations. This will be the fourth known study on expense preference behavior in hospitality and the only one concerned with casino firms overall. In addition, this will be the only known expense preference study that will evaluate management's reaction to a long-term economic downturn in regard to payroll-related expenses.

LITERATURE REVIEW

When an owner hires a manager or a management team to work for them they are establishing an agency relationship (Chatfield & Dalbor, 2005). With any agency relationship, there may be potential problems because of the conflicting interests between the owners and managers. While the goal of a firm's managers should be to increase the value of the firm for all shareholders, this may not always be achieved. Managers and owners each have different interests, and these interests typically involve maximizing their own wealth and not the wealth of the other party. When this conflict happens, agency problems arise. These agency problems can be monitored and controlled with effective contracts and monitoring, but at an increased cost. Minimizing agency problems and agency costs can effectively lead managers to maximize the value of the firm for the owners. Potential agency problems include information asymmetry, adverse selection, and moral hazard. Moral hazard on the part of managers within a casino is the concern of this study and occurs when one party takes a certain action and hides it from the other.

The agency problem of moral hazard can occur in many ways. One way is by expense preference behavior by managers. Expense preference behavior occurs when managers do not maximize the value of the firm but instead maximize their own personal utility (Williamson, 1963). This can involve management's potential desire for increased staff, expenditures for perquisites, and use of discretionary funds to the detriment of shareholders. Previous studies find that expense preference behavior by managers occurs more commonly in industries that are highly regulated (Mixon & Upadhyaya, 1996, 1999; Williamson, 1963). The gaming industry is considered one of the more highly regulated industries for various reasons including high barriers to entry due to licensing requirements and multiple regulatory agencies for consumer protection. Expense preference behavior has specifically been shown to exist in highly regulated industries under the following conditions: lack of competition and separation of ownership and control.

Competition

Mixon and Upadhyaya (1996, 1999) show that more regulations lead to higher expense preference behavior, while Gropper and Oswald (1996) and Gropper and Hudson (2003) analyze the opposite effect and find that after deregulation, expenses significantly decrease. Generally with deregulation comes additional competition, and many studies evaluate level of competition instead of regulation as an indicator of expense preference behavior.

Previous studies evaluate competition in numerous ways including monopolistic firms versus non-monopolies and market concentration. A high market concentration indicates less competition, while a low market concentration indicates a higher level of competition. In the seminal work on expense preference behavior theory, Williamson (1963) finds that market concentration is significant and positively related to executive compensation. Edwards (1977), Hannan (1979), and Arnould (1985) also find that managers in less

competitive markets exhibit expense preference behavior over those in more competitive markets. In these studies, as competition increases so does profitability because managers reduce costs to respond to the pressure of increased competition.

Carter, Massa, and Power (1997) and Rhoades (1980) show that market concentration is significant but negatively related to expenses. Carter et al. (1997) only find this significance in administrative expenses, not in payroll-related expenses, where they find no significance. These results shows that expenses are lower in high-concentration markets or there is no significant relationship, both of which reject expense preference behavior. Carter et al. (1997) and Hannan and Mavinga (1980) find that when taking into account the interaction between market concentration and management control, market concentration by itself is not significant.

Ownership Structure

With the conflicting results concerning market concentration, prior researchers evaluate other variables in addition to and in interaction with market concentration. The next most common variable studied is related to firm ownership structure. Many researchers believe that ownership structure can be an indicator of the level of separation between owners and managers, with differing ownerships structures lending to more or less of a separation. Verbrugge and Goldstein (1981), Verbrugge and Jahera (1981), and Akella and Greenbaum (1988) find that management in mutual savings and loans (S&Ls) exhibit expense preference behavior over those in stock S&Ls. The most likely reason is that there is less control and monitoring by owners in mutual S&Ls.

Another ownership structure evaluated was not-for-profit firms versus proprietary firms. Researchers believe that not-for-profit managers will spend more because not-for-profit firms cannot make money for their owners, although the results are mixed. Oswald, Gardiner, and Jahera (1994) and Carter et al. (1997) show that managers under a not-for-profit structure spend more than those under a proprietary structure, while Lewin et al. (1981) find different results depending on what expenses they evaluate.

Becker and Sloan (1985) believe it is important to control for other firm differences besides just ownership structure. Once controlling for factors other than ownership, the authors find that ownership structure does not affect expenses. Fields (1988) and Blair and Placone (1988) find that ownership structure is also not significant once they include firm size as a factor. Kim, Dalbor, and Feinstein (2007) evaluate management type (owner-managed or outsider-managed) as an indicator of ownership structure and also interaction with ownership percentage. Results show that management type by itself is not significant, although ownership percentage does show a significant positive relationship on cost of doing business. Results show that the cost of business is lowest for owner-managed firms with the manager owning 100%. Since the managers are also the owners, there is no separation of ownership. Also, as the percentage of primary ownership decreases, the mean size of staff significantly increases.

Firm Size

Another indicator of separation of ownership and control for companies is firm size, with an increase in firm size generally contributing to a further separation. Numerous studies find that firm size is a contributing factor to expense preference behavior by managers. Fields (1988), Gropper and Oswald (1996), Mixon and Upadhyaya (1996), and Carter et al. (1997) show that as firm size increases, expenses significantly increase. Blair and Placone (1988) and Smirlock and Marshall (1983) find that once firm size is taken into account, market concentration is no longer significant, indicating that firm size is the true variable affecting management behavior. Smirlock and Marshall (1983) and Williamson (1973) believe that the organizational complexity of a firm increases with its size, resulting in more layers and diffused ownership. As the number of layers increases, the amount of expense preference behavior throughout the

organization will increase. When evaluating the hotel division within Nevada casinos, Repetti and Dalbor (2014) also find that firm size is a factor. This study evaluates number of occupied rooms as a variable for firm size and finds that as the number of occupied rooms increases by 1%, hotel managers employ 0.91% more employees, which causes total payroll to increase 1.05%.

Although results are mixed, the majority of studies find support for utility maximization by managers over shareholder wealth maximization. Various dependent variables are evaluated with payroll-related variables as the most common. The independent variables used in determining expense preference behavior are size, competition, and ownership structure. As firms increase in size so do expenses, which may be an indication of expense preference behavior. Competition results are the most mixed, but most studies find that once other variables are accounted for, competition is no longer significant. Moreover, firms that have a larger diffusion of ownership have a tendency to have higher expenses, which may be an indicator of expense preference behavior by managers.

Hypotheses

Based on previous research, three hypotheses are proposed as indicators of expense preference behavior by managers. The first hypothesis evaluates total revenue, which is used as a proxy for firm size, with larger firms spending more in expenses due to the greater separation of ownership (Blair & Placone, 1988; Carter et al., 1997; Gropper & Oswald, 1996; Mixon & Upadhyaya, 1996; Smirlock & Marshall, 1983). The second hypothesis analyzes whether higher market share leads to expense preference behavior (Arnould, 1985; Edwards, 1977; Hannan, 1979; Williamson, 1963). Hypothesis three is concerned with periods of economic downturn and is a new variable in expense preference behavior research. During an economic downturn and after controlling for the effect of the change in business volumes, managers should not need to make any additional payroll adjustments since efficient managers should have already accomplished this due to the change in business volumes. If managers are exhibiting expense preference behavior, they may further decrease payroll expenses since they may have been overstaffed during the period prior to the economic downturn. The alternative hypotheses are stated below. The "a" hypotheses are for model 1, with a dependent variable of number of employees. The "b" hypotheses are for model 2, with a dependent variable of salaries and wages. The "c" hypotheses are for model 3, with a dependent variable of total payroll.

H1a: Number of employees will increase as casino size increases.
H1b: Salaries and wages will increase as casino size increases.
H1c: Total payroll will increase as casino size increases.
H2a: Number of employees will increase as market share increases.
H2b: Salaries and wages will increase as market share increases.
H2c: Total payroll will increase as market share increases.
H3a: Number of employees will decrease during a period of economic downturn.
H3b: Salaries and wages will decrease during a period of economic downturn.
H3c: Total payroll will decrease during a period of economic downturn.

METHODOLOGY

Data Collection

Annual data for 24 fiscal years ending June 30 of each year for 1990 to 2013 were obtained from the Nevada State Gaming Control Board's *Nevada Gaming Abstract*. These years were selected for two reasons: (1) They were the only years publicly available at the time of writing this paper and (2) Nevada had a significant change in the gaming landscape in the late 1980s with the addition of the first mega resort so starting with 1990 allowed the study to concentrate on the landscape that currently exists in the state. Each Nevada casino

with a nonrestricted gaming license and annual gaming revenue of $1 million or more is included in this report. A nonrestricted gaming license is issued by the state for casinos with at least 15 slot machines or that have any other casino game including a race book or sports book. The data are aggregated into groupings using geographical region and size. Each aggregate group of data was modified to be the average for each casino in that grouping. All dollars have been converted to 2013 constant dollars.

Model

The gaming industry in Nevada is a good industry in which to test expense preference behavior by managers. Based on the previous literature, high regulation and a large separation of ownership have been found to be indicators for expense preference behavior. The gaming industry in Nevada has very high barriers to entry due to the regulatory environment and high fixed-asset costs at start up. Also, during fiscal year 2013, 76.6% of gross gaming revenue in Nevada was produced by 66 publicly owned casinos (Nevada State Gaming Control Board, 2013). Being publicly owned, these casinos have a high separation of ownership.

Once these two variables are addressed, the other variables can be analyzed using multiple ordinary least squares (OLS) regression, which is the most common way previous research has been conducted on expense preference behavior. Also following all prior research, separate models were evaluated for the different expenses. In addition, hospitality firms, including casinos, have a large percentage of part-time and on-call employees (Worland & Wilson, 1988), so the number of employees and payroll expense models need to be evaluated separately so the effects on each can be individually analyzed. The three dependent variables (Y) are natural log of number of employees (model 1), natural log of total salaries and wages (model 2), and natural log of total payroll (model 3). Total payroll includes total salaries and wages, payroll taxes, and employee benefits. The data were transformed with a natural log to achieve normality and homoscedasticity.

The full model analyzed was:

$$Y_i = \beta_0 + \beta_1 Rev + \beta_2 Comp + \beta_3 Down + \varepsilon_i$$

Where

Y = Natural log of dependent variable
β = Coefficients for each predictor variable
Rev = Natural log of total revenue
Comp = Dummy variable coded as "1" for market share of 63% or higher and "0" otherwise
Down = Dummy variable coded as "1" for the economic downturn and "0" otherwise
ε = Error term

Market share was calculated as the percentage of revenue each aggregate group of casinos is accountable for in each market. A dummy variable of "1" indicates lower competition. A market share of 63% was used since this was the most common level used in previous research (Arnould, 1985; Hannan, 1979; Hannan & Mavinga, 1980). A market share of 76% was also tested since some previous research used that percentage and there were no significant differences in the results.

The dummy variable for an economic downturn was "1" for the long-term economic downturn that started in fiscal year ending June 30, 2008, and continued through 2013. These dates were used instead of the National Bureau of Economic Research's recession dates since Nevada casinos have not yet fully rebounded to pre-recession levels and had another year of decreases in revenue from 2012 to 2013. Nevada casinos also had a decrease in revenue in fiscal year ending June 30, 2002, as compared to the prior year but rebounded back to the 2001 level within the next year. An alpha level of .05 was used for statistical significance for all variables.

Potential multicollinearity among predictors was evaluated by analyzing variance inflation factors (VIF) for each of the three models. There were no VIFs greater than 1.1 and since a VIF above 10 is typically considered an indicator

TABLE 1. Descriptive Statistics

	N	Min	Max	Mean	Std. Dev.
Employees	400	52.00	4,308.00	785.67	894.61
Revenue*	400	4.88	711.78	85.73	126.30
Salaries and Wages*	400	1.13	152.32	21.48	29.46
Total Payroll*	400	1.34	212.29	29.34	41.61

Note. *in millions at 2013 constant dollars.

of multicollinearity, none of the models had multicollinearity issues (Kutner, Nachtsheim, Neter, & Li, 2005). The VIFs were the same for all three models. Also after transforming the data, there were a few outliers in model 1 only, but the results did not significantly change by deleting these outliers so they were left in the data set so capture all actual results.

RESULTS

Descriptive Summary

Descriptive statistics of all variables are shown in Table 1 and are in 2013 constant dollars. Figure 2 shows the trend of these means from 1990 to 2013. The number of employees had a mean value of 786 with a standard deviation of 895. The average number of employees fluctuated around 800 for the earlier years analyzed but since hitting a high point in 2000 has continually decreased besides a small increase prior to the recession. As of 2013, the mean number of employees was at the lowest level of all years, at 646 employees. Revenue had a mean of $85.7 million and a standard deviation of $126.3 million. Mean annual revenue steadily increased until fiscal year 2000 at which time it took a decline for three years before starting to increase again. This increase occurred until the start of the recession and mean annual revenue has remained relatively flat since then. Mean revenue in 2013 was just above the mean for the entire period. Salaries and wages had a mean value of $21.5 million and a standard deviation of $29.5 million. Total payroll had a mean value of $29.3 million and a standard deviation of $41.6 million. Both salaries and wages and total payroll followed similar trends over time. Both these expenses also followed the same trend as number of

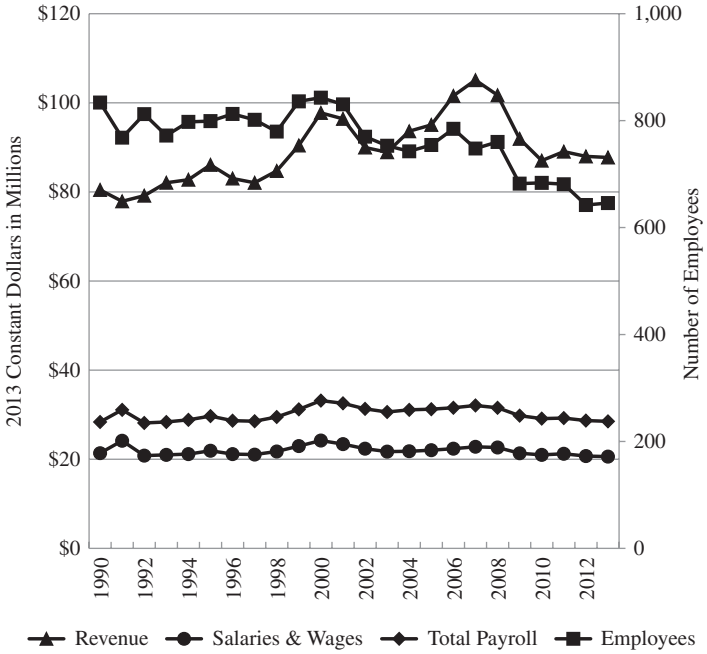

FIGURE 2. Mean revenue, employees, salaries and wages, and total payroll in Nevada casinos.

TABLE 2. Regression Coefficients for Model 1

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	*t*	Sig.
(Constant)	−9.126	.137		−66.389	.000*
Ln(Revenue)	0.876	.008	0.993	109.826	.000*
Market Share Dummy	−0.119	.020	−0.053	−5.859	1.000
Economic Downturn Dummy	−0.147	.021	−0.062	−7.104	.000*

Note. Dependent variable is Ln(Employees).
* $p < .0005$.

employees. In addition, both salaries and wages and total payroll in 2013 were approximately the same as the mean for the entire period. This is a different trend then the number of employees, which showed a 18% decrease in 2013 employees as compared to the mean.

The Pearson correlation between number of employees and revenue was .98. The Pearson correlation between "salaries and wages" and revenue was .99. The Pearson correlation between total payroll and revenue was also .99. All correlations were significant at the .01 level. Since Pearson correlation between a continuous variable and a nominal variable are typically not meaningful, these correlations are not discussed.

Overall Model Results

A high 97.0% of the variance in the natural log of employees was accounted for by the natural log of revenue, the market share variable, and the economic downturn variable. This model was significant in explaining the variance, $F\ (3,396) = 4{,}344.82$, $p < .0005$. Table 2 presents the regression results of model 1.

For model 2, 98.2% of the variance in the natural log of salaries and wages was accounted for by the natural log of revenue, the market share variable, and the dummy variable for the economic downturn. Results of the ANOVA show that this model was significant in explaining the variance, $F\ (3,396) = 7{,}203.02$, $p < .0005$. Table 3 presents the regression results of model 2 in which the dependent variable was the natural log of salaries and wages.

Model 3 shows that 98.8% of the variance in the natural log of total payroll was accounted for by the natural log of revenue, the market share dummy variable, and the economic downturn variable. This model was significant in explaining the variance, $F\ (3,396) = 10{,}702.52$, $p < .0005$. The regression results of model 3 in which the dependent variable was the natural log of total payroll are shown in Table 4.

Hypothesis 1: Firm Size

Results of all three models support hypothesis 1, that as revenue increased, all dependent variables also increased. Table 2 indicates that for each 1% increase in revenue, the number of employees increased 0.88%.

TABLE 3. Regression Coefficients for Model 2

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	*t*	Sig.
(Constant)	−0.934	.119		−7.847	.000**
Ln(Revenue)	0.984	.007	1.006	142.496	.000**
Market Share Dummy	−0.162	.018	−0.065	−9.255	1.000
Economic Downturn Dummy	−0.049	.018	−0.019	−2.747	.006*

Note. Dependent variable is Ln(Salaries and Wages).
*$p < .05$; **$p < .0005$.

TABLE 4. Regression Coefficients for Model 3

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	*t*	Sig.
(Constant)	−1.192	.101		−11.839	.000**
Ln(Revenue)	1.013	.006	1.008	173.478	.000**
Market Share Dummy	−0.149	.015	−0.058	−10.026	1.000
Economic Downturn Dummy	−0.039	.015	−0.014	−2.571	.011*

Note. Dependent variable is Ln(Total Payroll).
*$p < .05$; **$p < .0005$.

Based on Table 3, for each 1% increase in revenue, total salaries and wages increased 0.98%. Table 4 shows that for each 1% increase in revenue, total payroll increased 1.01%.

Hypothesis 2: Market Share

The market share dummy variable was not significant in any of the models for a one-tailed test since the coefficient was negative, which indicated that hypothesis 2 was not supported. The corresponding null is one-sided, hence the *p* value = 1.000 in each case. Please note that any software computes *p* values for two-sided alternatives and since the corresponding *t*-values were negative and opposite of the alternative, these are not significant.

Hypothesis 3: Economic Downturn

The economic downturn dummy variable was also significant in all models, which supported hypothesis 3 and implied that during a sustained economic downturn, casino firms decreased the number of employees, salaries and wages, and total payroll after controlling for firm size. During the 2008–2013 economic downturn, Nevada casino firms decreased the number of employees 14.7% as shown in Table 2. Table 3 shows that casino firms also decreased salary and wage expenses 4.9%. In addition, during this economic downturn, casino firms decreased total payroll expenses 3.9%, as shown in Table 4. These decreases were after taking into account the decrease in employees and expenses that occurred due to the change in revenue from lower business volumes.

DISCUSSION OF RESULTS

As casino firms increased in size and produced more revenue, they had more payroll-related expenses, which supports not only prior research but also hypotheses 1a, 1b, and 1c (Blair & Placone, 1988; Carter et al., 1997; Gropper & Oswald, 1996; Mixon & Upadhyaya, 1996; Repetti & Dalbor, 2014; Smirlock & Marshall, 1983). For each 1% increase in revenue, casinos hired 0.88% more employees, spent 0.98% more in salaries and wages, and incurred 1.01% more in total payroll. Based on the mean revenue for Nevada casino firms from Table 1, a 1% increase in revenue equated to $857,300. As Nevada casinos generated this additional revenue, they hired 6.9 more employees, spent $210,500 more in salaries and wages, and $296,300 in total payroll. Each additional employee generated $124,200 in annual revenue and cost the company $30,500 in salaries and wages and $42,900 in total payroll. When analyzing the entire sample period, each employee generated only $109,100 in revenue and cost the firms $27,300 in salaries and wages and $37,300 in total payroll. The additional employees produced more revenue than average over the 24-year period analyzed. The most likely reason is that as casinos generate additional revenue the increase in staff is variable positions and no additional fixed positions need to be added.

The thought that higher revenue may lead to more expense preference behavior by managers is because the larger the firm, the more separation and layers between owners and managers (Smirlock & Marshall, 1983). Another reason, and probably a more valid

TABLE 5. Effects of the 2008–2013 Economic Downturn on Dependent Variables

Dependent Variable	Mean	% Change	$ Change
Number of Employees	785.7	−14.7%	−115.50
Salaries and Wages*	$21.5	−4.9%	−$1.05
Total Payroll*	$29.3	−3.9%	−$1.14

Note. *in millions at 2013 constant dollars.

reason in casinos, could be that as firms increase in size and generate more revenue, they require more employees to produce that revenue. Managers may not be exhibiting expense preference behavior in that case. This predictor variable was still significant to control for revenue changes when evaluating the other variables.

The market share dummy variable was not significant in any of the three models and does not support any of hypotheses two. This finding did support what Smirlock and Marshall (1983) found, that when firm size is taken into account market concentration is not significant. These results also support what Repetti and Dalbor (2014) found when evaluating the hotel division within casinos. These findings, though, were opposite of what many previous expense preference studies reported, although not all of these previous studies included firm size in their analysis (Arnould, 1985; Carter et al., 1997; Edwards, 1977; Hannan, 1979; Hannan & Mavinga, 1980; Williamson 1963). Market share may not have been significant due to the fact that are more than 260 casinos in Nevada making over $1 million a year in gross gaming revenue and just because one casino has a large market share within a region there are many other casinos that are in a region close by. In addition, the high number of casinos in general may be causing the casinos to be more efficient in staffing levels since they have more standards and benchmarks to compare and adhere themselves to.

As shown in Table 5, during the largest economic downturn to hit Nevada casinos, management decreased the number of employees and payroll-related expenses, which supports hypotheses 3a, 3b, and 3c. These decreases occurred even after controlling for the decreases due to lower business volumes. Casinos decreased the number of employees 14.7% during this period. They also decreased salaries and wages 4.9% and total payroll 3.9%. These decreases equated to 115 employees, $1.05 million in salaries and wages, and $1.14 million in total payroll.

The decrease in salaries and wages equates to $9,100 per employee who was cut. While this amount may appear small, many jobs within the hospitality industry are hourly and part-time (Worland & Wilson, 1988). The large decrease in employees as compared to salaries and wages may be an indication that more part-time and on-call positions were cut during this time. For part-time and on-call employees, there can be little or no payroll related to these employees but they are considered an employee in this data set. This is most likely the reason for the large difference in the decrease in employees and the decrease in payroll expenses. While both went down, number of employees decreased almost three times that of salaries and wages. These results are not consistent with what Repetti and Dalbor (2014) found when evaluating just the rooms division within casino hotels. That study found that the 2007–2009 recession did not have a significant impact on payroll-related expenses, but that study only evaluated the hotel division which accounts for approximately 18% of total employees in Nevada casino resorts (Nevada State Gaming Control Board, 2013) and only evaluated the period immediately corresponding to the national recession. This study evaluated the entire resort including gaming, food, and beverage departments, which are generally much more labor-intensive than the hotel department, and it evaluated a longer time period of economic downturn to take into account long-term changes in staffing.

If casino managers were able to decrease payroll-related expenses during the economic downturn beyond the level necessary for the lower business volumes, they may have operated inefficiently during non-downturn periods. If managers were operating efficiently during these periods, they would have been able to accomplish the decrease in employees

and payroll expenses by just adjusting for the decrease in business volumes. This may be an indication that managers were exhibiting expense preference behavior during non-downturn periods. It is also possible that managers overcompensated during the 2008–2013 downturn like they did after September 11, 2001, but the period studied was six years long so this is likely not the cause of the significant difference since management could not be understaffed for that long.

CONCLUSION

Nevada casinos are highly regulated and the data collected for this study include larger firms, of which 76.6% are publicly owned. There is strong support from previous research that being highly regulated can give managers more opportunity to exhibit expense preference behavior (Gropper & Hudson, 2003; Gropper & Oswald, 1996; Mixon & Upadhyaya, 1996; Williamson, 1963). The fact that over three-fourths of the casinos are publicly owned shows that these firms have a high possibility of a greater separation of ownership, which is also supported by previous research to give managers a chance to exhibit expense preference behavior (Akella & Greenbaum, 1988; Oswald et al., 1994; Verbrugge & Goldstein, 1981; Verbrugge & Jahera, 1981).

With these two characteristics standard for all firms tested, Nevada casinos could be evaluated with other variables. Firm size was found to have a significant positive relationship to payroll-related expenses, which supports previous research (Blair & Placone, 1988; Carter et al., 1997; Fields, 1988; Gropper & Oswald, 1996; Mixon & Upadhyaya, 1996; Repetti & Dalbor, 2014; Smirlock & Marshall, 1983; Williamson, 1973). As Nevada casinos increased revenue by 1%, they also spent between 0.98% and 1.01% more in payroll-related expenses. While previous research has stated that the increase in payroll is an indication of expense preference behavior, it may also just be a control variable to accurately interpret the effect of other variables.

This study is the first known study in which a long-term economic downturn was used to test whether managers overspent in payroll expenses. Results showed that Nevada casino managers were able to cut employees and payroll expenses during the economic downturn of 2008–2013 even after accounting for the decrease in firm size and the effects of competition. That casinos were able to cut almost 15% of their employees during the downturn may be an indication that they were heavily overstaffed during the decades before. This gives support of expense preference behavior by managers during periods on sufficient revenue growth.

Implications of Findings

The findings of this study have both academic and managerial implications. An academic implication is that this study adds to the previous literature on expense preference behavior. This study is the first known study that evaluates a sustained period of economic downturn and management's response to that in relation to expense preference behavior, so a new variable has been found that may indicate expense preference behavior by managers. This new variable can be used not only in other hospitality segments but also to test expense preference behavior in other unrelated industries. This is also the only known study on expense preference behavior in the gaming industry and only the fourth study in hospitality, so it fills a gap in the literature. This study shows that the gaming industry is not managed like the banking industry or the other financial services industries evaluated in previous research and, as such, academia and researchers need to study it separately.

The managerial implications show casino managers and owners that they were overstaffed during revenue growth periods. This is important for many reasons. One reason is that more money was being spent on payroll-related expenses that could have been paid to owners in the form of dividends or used for growth of the properties, both of which would have increased shareholders' wealth. The additional cash savings could have also been used to borrow less if the company was borrowing to grow. It could also be saved and used in times when the

company has low or negative earnings before interest, taxes, depreciation, and amortization (EBITDA), as was the case for many casinos during the sustained period of fiscal years ending June 30, 2009–2013. EBITDA is used synonymously for operating income in casino operations and is a performance measurement for operating efficiency and effectiveness.

Another managerial implication about being overstaffed during high-growth economic times concerns union contracts. Nevada casinos typically sign 5- or 10-year union contracts (Stutz, 2007). By signing these contracts when the casinos were already overstaffed they were committing to using a higher level of staffing than is required, as was the case in 2007 when many Nevada casinos signed new union contracts. When revenue and business volumes were increasing every year this may not have been a concern because the casinos needed the employees as business volumes continued to rise. When business volumes suddenly decreased and union contracts required casinos to give employees a certain level of hours and benefits, management did not have as much flexibility to adjust. If they were staffed at the right level to begin with, they would not have had to cut as drastically and would not have had to renegotiate contracts that had a higher level of required employees.

This study can be used as a basis for theory and a beginning model for individual casinos to evaluate their own payroll related expenses. Individual casinos could implement a time series model with monthly data and more detailed payroll expenses. Fixed and variable positions or management and hourly employees could be evaluated separately to see whether one category of employees is treated differently. Casino management could evaluate their property as compared to these results to see whether they adjusted differently.

LIMITATIONS AND SUGGESTED FUTURE RESEARCH

As with any research, this study is not without limitations. The main limitations were with the data. First, individual property information was not available. If properties were staffing differently, the differences may be hidden in the aggregate data. Another limitation was that the data are annual. Monthly data may show the effects of the predictor variables better. A third limitation is that number of employees was the only variable available for staffing levels. A better indication of employees may be full-time equivalents or hours worked since these actually state the amount of work done, not how may people are employed. If these variables were available, the number of employees model may be more in line with the results from the other two models. Future research could be a duplication of this study with individual casino properties in Nevada, which could alleviate these limitations.

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